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SEQUENCE LISTING

<110> Lyon, Jeffrey A.
 Angov, Evelina
 Cohen, Joe D.
 Voss, Gerald

<120> Recombinant *P. falciparum* Merozoite Protein-1₄₂ Vaccine

<130> 003/238/SAP

<140> US 10/057,532

<141> 2002-01-25

<150> US 60/264,535, US 60/347,564

<151> 2001-01-26, 2001-10-26

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<170> Apple Macintosh Microsoft Word 6.0

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<212> PRT

<213> Artificial sequence

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<223> *E. coli* expressed *P. falciparum* MSP1₄₂ (3D7) Protein
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Pro	Ile	Leu	Asp	Glu	Ile	Ala	Asp	Glu	Tyr		
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Tyr Arg Ser Leu	Lys Lys Gln Ile Glu Lys		
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	375		380
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Phe Lys Asn Pro	Tyr Asp Phe Glu Ala Ile		
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Lys Lys Leu Ile	Asn Asp Asp Thr Lys Lys		
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Ser Lys Leu Ile	Glu Gly Lys Phe Gln Asp		
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Phe	Ala	Gln	Glu	Gly	Ile	Ser	Tyr	Tyr	Glu			
Lys	Val	Leu	Ala	Lys	Tyr	Lys	Asp	Asp	Leu			
Glu	Ser	Ile	Lys	Lys	Val	Ile	Lys	Glu	Glu			
Lys	Glu	Lys	Phe	Pro	Ser	Ser	Pro	Pro	Thr			
Thr	Pro	Pro	Ser	Pro	Ala	Lys	Thr	Asp	Glu			
Gln	Lys	Lys	Glu	Ser	Lys	Phe	Leu	Pro	Phe			

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Cys Thr Glu Glu	Asp Ser Gly Ser Ser Arg	365	370
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aatgaataca	ttattgaaga	ttcatttaaa	ttattgaatt	280
cagaacaaaa	aaacacactt	ttaaaaagtt	acaaatatat	320
aaaagaatca	gtagaaaatg	atattaaatt	tgcacaggaa	360
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agttaataaa attgacgatt acttaattaa cttaaaggca 600
aagattaacg attgtaatgt tgaaaaagat gaagcacatg 640
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attaaaaaat tgataaatga tgatacgaaa aaagatatgc 760
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Asn Ser Arg Leu Lys Lys Arg Lys Tyr Phe
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Pro Phe Leu Thr	Asn Ile Glu Thr Leu Tyr		
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	195		200
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	225		230
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	235		240
Pro Thr Asp Phe	Glu Ala Ile Lys Lys Leu		
	245		250
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	255		260
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	265		270
Ile Phe Pro Asn	Thr Ile Ile Ser Lys Leu		
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Ile Glu Gly Lys	Phe Gln Asp Met Leu Asn		
	285		290
Ile Ser Gln His	Gln Cys Val Lys Lys Gln		
	295		300
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	305		310
Leu Asp Glu Arg	Glu Glu Cys Lys Cys Leu		
	315		320
Leu Asn Tyr Lys	Gln Glu Gly Asp Lys Cys		
	325		330
Val Glu Asn Pro	Asn Pro Thr Cys Asn Glu		
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Cys Thr Glu Glu	Asp Ser Gly Ser Ser Arg		
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10/14

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<211> 1176

<212> DNA

<213> Artificial sequence

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<223> *E. coli* expressed *P. falciparum* MSP-1₄₂ (3D7)

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Glu	Asn	Glu	Tyr	Asp	Val	Ile	Tyr	Leu	Lys	
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Pro	Leu	Ala	Gly	Val	Tyr	Arg	Ser	Leu	Lys	
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Arg	Leu	Lys	Lys	Arg	Lys	Tyr	Phe	Leu	Asp	
				75					80	
Val	Leu	Glu	Ser	Asp	Leu	Met	Gln	Phe	Lys	
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His	Ile	Ser	Ser	Asn	Glu	Tyr	Ile	Ile	Glu	
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Asp	Ser	Phe	Lys	Leu	Leu	Asn	Ser	Glu	Gln	
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Lys	Asn	Thr	Leu	Leu	Lys	Ser	Tyr	Lys	Tyr	
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Lys	Glu	Lys	Phe	Pro	Ser	Ser	Pro	Pro	Thr	
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Thr	Pro	Pro	Ser	Pro	Ala	Lys	Thr	Asp	Glu	
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Gln	Lys	Lys	Glu	Ser	Lys	Phe	Leu	Pro	Phe	
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Leu	Leu	Ser	Thr	Gly	Leu	Val	Gln	Asn	Phe	
				275					280	
Pro	Asn	Thr	Ile	Ile	Ser	Lys	Leu	Ile	Glu	
				285					290	
Gly	Lys	Phe	Gln	Asp	Met	Leu	Asn	Ile	Ser	
				295					300	
Gln	His	Gln	Cys	Val	Lys	Lys	Gln	Cys	Pro	
				305					310	
Glu	Asn	Ser	Gly	Cys	Phe	Arg	His	Leu	Asp	
				315					320	
Glu	Arg	Glu	Glu	Cys	Lys	Cys	Leu	Leu	Asn	
				325					330	
Tyr	Lys	Gln	Glu	Gly	Asp	Lys	Cys	Val	Glu	
				335					340	
Asn	Pro	Asn	Pro	Thr	Cys	Asn	Glu	Asn	Asn	
				345					350	
Gly	Gly	Cys	Asp	Ala	Asp	Ala	Thr	Cys	Thr	
				355					360	
Glu	Glu	Asp	Ser	Gly	Ser	Ser	Arg	Lys	Lys	
				365					370	
Ile	Thr	Cys	Glu	Cys	Thr	Lys	Pro	Asp	Ser	
				375					380	
Tyr	Pro	Leu	Phe	Asp	Gly	Ile	Phe	Cys	Ser	
				385					390	

Ser

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<211> 24

<212> DNA

<213> Artificial sequence

<220>

<223> CpG oligonucleotide

<400> 8

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24

<210> 9

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13/14

<212> DNA

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<223> PCR primer

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cacaatgg                                     48
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<210> 10

<211> 29

<212> DNA

<213> Artificial sequence

<220>

<223> PCR primer

<400> 10

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gtcgacttag gaactgcaga aaataccgg 29
```

<210> 11

<211> 45

<212> DNA

<213> Artificial sequence

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<223> PCR primer

<400> 11

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ccgac                                           45
```

<210> 12

<211> 57

<212> DNA

<213> Artificial sequence

<220>

<223> PCR primer

<400> 12

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gggcatatgg cacaccatca tcatcatcat cccgggggat 40
ccggttctgg taccgac 57
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